

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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**APR 29 2004**

Applicant: Bing Chiang, James A. Proctor, Jr. and Kenneth M. Gainey

Application No.: 09/774,534

Group Art Unit: 2817

**OFFICE OF PETITIONS**

Filed: January 31, 2001

Examiner: Kimberly E. Glenn

Confirmation No.: 3250

Title: ELECTRONIC PHASE SHIFTER WITH ENHANCED PHASE SHIFT PERFORMANCE

**VIA HAND DELIVERY**

*Copy only*

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Office of Petitions  
Crystal Plaza 4  
Suite 3C23  
2201 South Clarke Place  
Arlington, VA 22202

Sir:

This Information Disclosure Statement is submitted:

☐ under 37 CFR 1.129(a), or  
(First/Second submission after Final Rejection)

☒ under 37 CFR 1.97(b), or  
(Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).

☐ under 37 CFR 1.97(c) together with either:

☐ a Statement under 37 CFR 1.97(e), as checked below, or

☐ a \$180.00 fee under 37 CFR 1.17(p), or

(After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)

☐ under 37 CFR 1.97(d) together with:

☐ a Statement under 37 CFR 1.97(e), as checked below, and

☐ a \$180.00 fee under 37 CFR 1.17(p), or

(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)

☐ under 37 CFR 1.97(i):

Applicant requests that the IDS and cited reference(s) be placed in the application filewrapper.

(Filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

- ☐ Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
- ☐ No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Statement Under 37 CFR 1.704(d) (Patent Term Adjustment)

Applies to original applications (other than design) filed on or after May 29, 2000

- ☐ Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.

☒ Enclosed herewith is form PTO-1449:

☒ Copies of the cited references are enclosed.

- ☐ Since this application was filed after June 30, 2003, copies of issued U.S. patents and published U.S. applications are not required and are not being provided.
- ☐ Copies of the cited references are enclosed except those entered in prior application, U.S. Application No. [ ], to which priority under 35 U.S.C. 120 is claimed. [The earlier application contains copies of the cited references.]
- ☐ The listed references were cited in the enclosed International Search Report in a counterpart foreign application.
- ☐ The "concise explanation" requirement (non-English references) for reference(s) [ ] under 37 CFR 1.98(a)(3) is satisfied by:
  - ☐ the explanation provided on the attached sheet.
  - ☐ the explanation provided in the Specification.
  - ☐ submission of the enclosed International Search Report.
  - ☐ submission of the enclosed English-language version of a foreign Search Report and/or foreign Office Action.
  - ☐ the enclosed English language abstract.

☐ Applicant requests that the following non-published pending applications be considered:

Examiner's  
Initials

\_\_\_\_\_ U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]

\_\_\_\_\_ U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]

\_\_\_\_\_ U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]

\_\_\_\_\_  
Examiner

\_\_\_\_\_  
Date

☐ A copy of each above-cited application, including the current claims, is enclosed.

☐ A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [ ], to which priority under 35 U.S.C. 120 is claimed.

The Examiner is requested to return a copy of the above list of pending applications indicating which references were considered with the next office communication.

It is requested that the information disclosed herein be made of record in this application.

Method of payment:

☐ A check for the fee noted above is enclosed, or the fee has been included in the check with the accompanying Reply. A copy of this Statement is enclosed.

☐ Please charge Deposit Account 08-0380 in the amount of \$[ ]. A copy of this Statement is enclosed.

☒ Please charge any deficiency in fees and credit any overpayment to Deposit Account 08-0380.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By \_\_\_\_\_

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Dated:

4/28/01

**SUPPLEMENTAL INFORMATION  
DISCLOSURE CITATION  
IN AN APPLICATION**

**April 28, 2004**

(Use several sheets if necessary)

ATTORNEY DOCKET NO.  
2479.2028-000

APPLICATION NO.  
09/774,534

FIRST NAMED INVENTOR  
Bing Chiang

FILING DATE  
January 31, 2001

EXAMINER  
Kimberly E. Glenn

CONFIRMATION NO.  
3250

GROUP  
2817

**U.S. PATENT DOCUMENTS**

EXAM- INER INI- TIAL	REF. NO.	DOCUMENT NUMBER Number-Kind Code (if known)	ISSUE DATE / PUBLICATION DATE MM-DD-YYYY	NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT
	AD	4,539,535	09-03-1985	Miller, <i>et al.</i>
	AE			
	AF			
	AG			
	AH			
	AH			
	AJ			
	AK			
	AA2			
	AB2			
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**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

AR

Birks, T. A., *et al.*, Four-Port Fibre Frequency-Shifter with a Null Taper Coupler [online], 1994 [retrieved on 2004-04-28]. Retrieved from the Internet  
<URL:http://www.ecs.soton.ac.uk/publications/rj/1994/ofg/birks/birks.html>.

AS

Ellinger, F., "Compact Reflective-Type Phase Shifter MMIC for C-Band Using a Lumped-Element Coupler," *IEEE Transactions on Microwave Theory and Techniques*, 49(5):913-917 (2001).

AT

"RF Directional Couplers and 3dB Hybrids Overview" No date given.

AU

Akkaraekthalin, P., *et al.*, "Conductor-Backed Coplanar Waveguide Directional Coupler and Its Use for a Varactor-Tuned 90° Phase Shifter," King Monkut's Institute of Technology North Bangkok

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